

## UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/675,695	09/29/2000	Richard A. Haase		1492
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J. M. (Mark) Gilbreth			EXAMINER	
GILBRETH & ASSOCIATES, P.C. P.O. Box 2428			HRUSKOCI,	, PETER A
Bellaire, TX 7	7402-2428		ART UNIT	PAPER NUMBER
			1724	
			DATE MAILED: 10/16/2002	2

Please find below and/or attached an Office communication concerning this application or proceeding.

		7	C-23			
	Application No.	Applicant(s)				
	09/675,695	HAASE, RICHARD	A.			
Office Action Summary	Examiner	Art Unit				
	Peter A. Hruskoci	1724				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet v	vith the correspondence add	ress			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	86(a). In no event, however, may a within the statutory minimum of th fill apply and will expire SIX (6) MC cause the application to become A	reply be timely filed  irty (30) days will be considered timely.  NTHS from the mailing date of this con  BANDONED (35 U.S.C.§ 133).	nmunication.			
1) Responsive to communication(s) filed on 11 J	une 2002 and 09 Septer	<u>mber 2002</u> .				
2a)⊠ This action is FINAL. 2b)□ Thi	s action is non-final.					
Since this application is in condition for allowa closed in accordance with the practice under bull Disposition of Claims			ments is			
4) Claim(s) 20-40,66 and 67 is/are pending in the	e application.					
4a) Of the above claim(s) is/are withdraw	vn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>20-40,66 and 67</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9)⊠ The specification is objected to by the Examiner	•					
10) ☐ The drawing(s) filed on is/are: a) ☐ accep	ted or b)☐ objected to by	the Examiner.				
Applicant may not request that any objection to the						
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in rep	•					
12)☐ The oath or declaration is objected to by the Exa	aminer.					
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C.	§ 119(a)-(d) or (f).				
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents	s have been received.					
2. Certified copies of the priority documents	have been received in	Application No				
<ul> <li>3.☐ Copies of the certified copies of the priori</li> <li>application from the International Bur</li> <li>* See the attached detailed Office action for a list of</li> </ul>	eau (PCT Rule 17.2(a))		tage			
14) Acknowledgment is made of a claim for domestic	priority under 35 U.S.C	. § 119(e) (to a provisional a	application).			
a) ☐ The translation of the foreign language prov 15)☐ Acknowledgment is made of a claim for domestic	• •					
Attachment(s)	- -					
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice o	Summary (PTO-413) Paper No(s Informal Patent Application (PTO				

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The disclosure is objected to because of the following informalities: In the 1. specification on page 18 line 12 "Methacryloyioxyethyltrimethyl", and on page 46 line 17 "Unites" appear to be erroneous.

Appropriate correction is required.

- The specification is objected to as failing to provide proper antecedent basis for 2. the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: It is submitted that the ratio recited in claim 21 lacks clear antecedent basis in the specification.
- Claims 20-23 are rejected under 35 U.S.C. 112, first paragraph, as containing 3. subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claims 20-23 "within a water phase" lacks clear antecedent basis in the specification as originally, and appears to be drawn to new matter.
- Claim 25 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite 4. for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 25 "whereiion" is erroneous and should be changed to wherein -.

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5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 20-22, 24-26, and 28-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hassick et al. 4,800,039. Hassick et al. disclose (see col. 1 line 31 through col. 3 line 51, and Table I) a process for clarification of water substantially as claimed. It is noted Table I of Hassick et al. discloses that it is known in the art of water treatment to utilize a combination of aluminum chlorohydrate or alum, and DADMAC to clarify water. The claims differ from Hassick et al. by reciting that the water has a specific raw alkalinity, and the ammonium polymers has a specific molecular weight. It is submitted that the process disclosed in Hassick does not appear to be limited to a specific alkalinity, and would appear to be effective at the alkalinity recited in the instant claims. It is submitted that the polymers disclosed in Hassick et al. are considered patentably indistinguishable from the polymers recited in the instant claims, and would appear to include the instant molecular weights. It would have been obvious to one skilled in the art of water treatment to modify the process of Hassick et al. by utilizing the recited polymers to treat water having the recited alkalinity, to aid in clarifying the water.

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The specific residual soluble aluminum and IOC contents, alkalinity, and NTU of the water, ratios, and molecular weights utilized, and the addition of an aluminum salt, would have been an obvious matter of process optimization to one skilled in the art, depending on the specific water treated and results desired, absent a sufficient showing of unexpected results.

- 7. Claims 35 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hassick et al. as above, and further in view of Graham et al.. The claims differ from Hassick et al. as applied above by reciting that the process includes the addition of ozone to remove TOC and/or DOC, and algae. Graham et al. disclose (see col. 5 line 5 through col. 6 lines 38) that it is known in the art of water to utilize ozone to aid in removing DOC and algae from water. It would have been obvious to one skilled in the art to modify the process of Hassick et al. as applied above, by addition of ozone in view of the teachings of Graham et al., to aid in removing DOC and algae from the water.
- 8. Claims 36, 38, and 66 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hassick et al. as above, and further in view of Reilly et al.. The claims differ from Hassick et al. as applied above by reciting that the process includes the removal of algae. Reilly et al. disclose (see col. 8 line 50 through col. 11 line 45) that it is known in the art of water to utilize aluminum salts and ammonium polymers such as DADMAC to aid in removing algae and turbidity from water. It would have been obvious to one skilled in

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the art to utilize the process of Hassick et al. as applied above, to remove algae from the water in view of the teachings of Reilly et al., to aid in clarifying the water.

- 9. Claims 23-29, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kigel et al. Kigel et al. disclose (see col. 5 line 5 through col. 8 line 11) a process for clarification of water substantially as claimed. The claims differ from Kigel et al. by reciting that the water has a specific raw alkalinity and the polymer has a specific molecular weight. It is submitted that the waters treated in Kigel et al. does not appear to be limited to a specific alkalinity and would appear to include water having the recited alkalinity. It is submitted that the polymers disclosed in Kigel et al. are considered patentably indistinguishable from the polymer recited in the instant claims, and would appear to include the instant molecular weights. It would have been obvious to one skilled in the art of water treatment to utilize the process of Kigel et al. to treat water having the recited alkalinity with the recited polymers, to aid in clarifying the water. The specific residual soluble aluminum and IOC contents, alkalinity, and NTU of the water, and the addition of an aluminum salt, would have been an obvious matter of process optimization to one skilled in the art, depending on the specific water treated and results desired, absent a sufficient showing of unexpected results.
- 10. Claims 34, 35, 37, 39, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kigel et al. as above, and further in view of Simmsgeiger. The claims

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differ from Kigel et al. as applied above by reciting that polyacrylamide contains quaternized nitrogen, and the process includes the addition of ozone and the removal of algae. Simmsgeiger disclose (see col. 3 line 8 through col. 6 line 20) that it is known in the art of water to utilize cationic polyacrylamide and ozone to aid in removing algae and turbidity from water. It would have been obvious to one skilled in the art to modify the process of Kigel et al. as applied above, by addition of the recited polyacrylamide and ozone in view of the teachings of Simmsgeiger, to aid removing algae and in clarifying the water.

- 11. Claim 67 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hassick et al. in view of Reilly et al. as above, and further in view of Buchan et al.. The claim differs from the references as applied above by reciting that the process includes the addition of an algaecide. Buchan et al. disclose (see col. 10 line 27 through col. 12 line 68) that it is known in the art of water to utilize aluminum salts, polymer flocculants, and algaecides, to aid in removing algae and solid impurities from water. It would have been obvious to one skilled in the art to modify the references as applied above, by addition of an algaecide in view of the teachings of Buchan et al., to aid in removing algae from the water.
- 12. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent

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and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

- 13. Claims 20-22, 24-26, 28-33, and 36-38 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-22 of U.S. Patent No. 6,120,690. Although the conflicting claims are not identical, they are not patentably distinct from each other because the process steps recited in the instant claims appear to be included in the claims of the patent.
- 14. Applicant argues that the instant claims are patentable over the prior art applied above because unexpected results have been demonstrated by applicant for those molecular weight ranges of ammonium polymer. The results shown in the instant Examples and table have been carefully considered but fail to overcome the above rejection. The specific test conditions utilized to produce the results are not commensurate with the scope of the instant claims. Furthermore, the results do not

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appear to include sufficient comparative evidence with the teachings of the prior art as applied above to support the above argument.

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter A. Hruskoci whose telephone number is (703) 308-3839. The examiner can normally be reached on Monday through Friday from 6:30 AM to 4:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. David Simmons, can be reached on (703) 308-1972. The fax phone number for this Group is (703) 872-9310 (non-after finals) and 703-872-9311 after finals.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

Peter A. Hruskoci Primary Examiner Art Unit 1724

P. Hruskoci October 15, 2002